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REMARKS

Claim Amendments

As a preliminary matter, claims 1, 3 to 6, 11 and 12 are amended herein without prejudice to the reintroduction of the claims as originally filed, later in the prosecution or in a continuing application.

The amendments to claims 1, 3, 4 and 5 clarify which physical properties belong to the plasticized polyvinyl butyral composition, and which belong to the PVB resin composition comprised by the plasticized polyvinyl butyral composition. A basis for these amendments may be found in the specification on page 6 at lines 18 to 26, for example.

Claim 6 is amended herein to reflect that the temperature of the reaction mixture is 80°C to 100°C. A basis for this amendment may be found in the specification on page 9 at lines 14 to 18, for example.

Claim 11 is amended to delete a needlessly repeated phrase.

Finally, claim 12 is amended herein to further clarify that the antecedent basis of the phosphoric acid is the acid compound or mixture of acid compounds that is a specifically recited feature of claim 6, from which claim 12 ultimately depends. It is believed that this amendment overcomes the rejection in the Official Action under 35 U.S.C. § 112 for indefiniteness. Accordingly, Applicants respectfully request that this rejection be withdrawn upon reconsideration. Applicants further note that no other reason is set forth in the Official Action why the subject matter of claim 12 is not patentable. Applicants therefore earnestly solicit an early indication of the allowability of claim 12.

It is believed that the amendments to claims 1, 3 to 5, 11 and 12 are purely formal, that they are unrelated to the patentability of the present invention, and that they do not change the scope of the claims. Because all of the amendments presented herein have a basis on the specification as filed, they introduce no new matter into the application.

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Restriction Requirement

The Official Action asserts that the claims of the present application lack unity of invention, and accordingly restriction has been required between three groups of claims as follows:

Group I, claims 1 through 5, directed to a plasticized polyvinyl butyral composition;

Group II, claims 6 through 12, directed to a process for preparing a polyvinyl butyral resin composition; and

Group III, claims 13 through 18, product-by-process claims directed to a plasticized polyvinyl butyral composition.

In this connection, the Examiner is thanked for the courtesies extended to Dr. Kevin S. Dobson in a telephone conversation on February 7, 2006, during which this restriction requirement was discussed. Applicants hereby affirm the election, with traverse, made by Dr. Dobson for immediate examination of the invention of Group II, claims 6 to 12. Accordingly, claims 1 through 5 and 13 through 18 now stand withdrawn, without prejudice to their rejoinder later in the prosecution or reintroduction in a continuing application.

The claims are not lacking unity, however, because they share a special technical feature (37 C.F.R. § 1.475(a)), specifically, the polyvinyl butyral (PVB) resin composition. The polyvinyl butyral resin composition is a specifically recited feature of independent claims 1 (as amended), 6, and 13. Each independent claim explicitly recites that the polyvinyl butyral resin composition has a hydroxyl number of about 15 to about 34 and a mixture of meso and racemic stereoisomers in which the ratio of meso stereoisomers to racemic stereoisomers is in the range of from about 2.5 to about 5.0.

Significantly, no rejection for lack of unity was made in the international phase of the prosecution of this application. Moreover, it is well established that unity of invention exists between a "product and a process specially adapted for the manufacture of said product." 37 C.F.R. § 1.475(b)(1). Here, claim 1 is drawn to a

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plasticized polyvinyl butyral composition that comprises the polyvinyl butyral resin composition, and claim 6 is drawn to a process for making the polyvinyl butyral resin composition. Thus, there is no lack of unity between claim 1 and claim 6. Likewise, the patentability of product-by-process claim 13 is based on the patentability of the product itself. See, e.g., M.P.E.P. at § 2113. Thus, there is also unity between claim 1 and claim 13.

Consequently, Applicants respectfully request that this restriction requirement be withdrawn upon reconsideration, and that the claims of Groups I and III be rejoined forthwith for examination together with the claims of Group II.

Substantive Rejections

Claims 6, 7, 8, 10 and 11 are rejected under 35 U.S.C. § 102 as allegedly anticipated by, or, in the alternative, under 35 U.S.C. § 103 as obvious over European Patent No. 0 402 213, issued to Klock et al. (hereinafter "Klock"). Claim 9 is rejected under 35 U.S.C. § 103 as allegedly obvious over Klock in view of 5,750,482, issued to Cummings (hereinafter "Cummings").

These are the sole substantive reasons set forth in the Official Action why the present application should not be allowed. Applicants respectfully traverse these rejections for the reasons set forth below.

First, as is noted in the Official Action, Klock describes a process for synthesizing polyvinyl butyral in which a reaction mixture of polyvinyl alcohol and butyraldehyde is held at a temperature between 5 and 12°C, after which the temperature is raised to between 60°C and 80°C. Claim 6, as amended, however, now includes the feature that the reaction mixture is stirred at a temperature in the range of from 80°C to about 100°C to obtain the PVB resin composition. A reaction temperature in this range is neither described nor suggested by Klock; therefore, claim 6 is neither anticipated by nor obvious over Klock. Because claims 7, 8, 10 and 11 depend, directly or indirectly, from claim 6, it follows by statute that they are also neither anticipated by nor obvious over Klock. Accordingly, Applicants respectfully request that these rejections be withdrawn upon reconsideration.

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Second, Cummings has been cited in support of the proposition that sodium methyl cocoyl taurate is functionally equivalent to sodium lauryl sulfonate. This proposition may hold true in the art of glass cleaning compositions, to which the description of Cummings pertains. The art of cleaning glass, however, is completely inapposite to the field of the present invention, specifically, processes for preparing polyvinyl butyral compositions. Therefore, Applicants respectfully submit that the rejection citing Cummings is improper. See, e.g., M.P.E.P. at § 2141.01(a)(i).

In addition, because Cummings does not pertain to the synthesis of polyvinyl butyral compositions, it includes no teachings or suggestions whatsoever regarding reaction temperatures of polyvinyl alcohol with butyraldehyde. Therefore, Klock and Cummings, in combination, do not teach or suggest every element of claim 6, from which claim 9 depends. See M.P.E.P. at § 2143 and 35 U.S.C. § 112, fourth paragraph.

Therefore, claim 9 is not obvious over Klock in view of Cummings. Consequently, Applicants respectfully request that this rejection be withdrawn upon reconsideration.

Conclusion

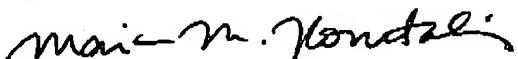
A Petition for an Extension of Time of three months and the required fee for the extension are filed concurrently herewith. Should any further fee be required in connection with the present amendment, the Examiner is authorized to charge such fee, or render any credit due, to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

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In view of the foregoing, it is believed that pending claims 6 through 12 are in condition for immediate allowance, and such action is respectfully requested. Should the Examiner believe that an interview or other action in Applicants' behalf would expedite prosecution of the application, the Examiner is urged to contact Applicants' undersigned attorney by telephone at (302) 892-1004.

Respectfully submitted,



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